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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,334	11/30/2001	Masahiro Sato	NGB-106-A	4987

7590 01/06/2003
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EXAMINER
CULBRETH, ERIC D

ART UNIT	PAPER NUMBER
3616	

DATE MAILED: 01/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/997,334

Applicant(s)

SATO ET AL.

Examiner

Eric D Culbreth

Art Unit

3616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____

- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 3616

DETAILED ACTION

Drawings

1. The drawings are objected to because section lines in drawings should be named for the figure they represent. Hence, line A-A in Figure 2 should be 3-3, line B-B in Figure 4 should be line 5-5, etc. throughout the Figures. (The specification should be changed appropriately). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 41-44 and 47a-47b in Figures 7-8 and 51-52 and 56a-56b in Figures 9-10. In fact, the drawings are replete with reference numerals that are not discussed in the description; the description and drawings should be carefully reviewed and corrected. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. The substitute specification filed 11/30/01 has not been entered because it does not conform to 37 CFR 1.125(b) because: Some of the lines lack space between the words, so that the printer would not be able to discern the text should the case issue. For instance, words on

Art Unit: 3616

page 2, line 2 and page 3, line 6 of the substitute specification are so jammed together that it is not clear where words end and where others begin. Note also page 7, lines 16, 19 and 12. The substitute claims and abstract have been entered to expedite prosecution, but the substitute specification needs to be resubmitted.

4. The disclosure is objected to because of the following informalities: In page 9, line 18 of the substitute specification "a" should be "an", and on page 11, line 15 "inflating" should be "inflated". Also, on page 11, line 25 of the substitute specification "penetrates" is the wrong word for the occasion (i.e. the opening does not "penetrate" into four openings, but rather forms four openings).

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1 and claim 3, line 2 "inflates" should be "inflating" in order to form a complete sentence.

In claim 4, line 3 has no spaces between the words and hence is not clear.

Art Unit: 3616

Also, in claim 4, lines 2-3 "two or more" is not clear (i.e., two or more what).

Claims 10-11 are indefinite because they are not accurate to the invention. There is no one embodiment disclosed that has both a penetrating portion and a joint portion.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-2, 7 and 10-11 as best understood are rejected under 35 U.S.C. 102(e) as being anticipated by Shiota et al (US Patent 5,427,410).

Shiota et al discloses an air bag folded and housed in an instrument panel (column 1, lines 15-25) and inflated by an inflator 16 when the vehicle collides (column 1, lines 15-25). As seen in Figure 2, gas from the generator flows into an opening portion of the air bag (at the left side of the bag in Figure 2). The bag 10 also has a gas flow portion above and below cavity 20 as broadly recited and an occupant restraining portion at the right side of Figure 2 (note especially Figures 5 and 6). The gas flows from the opening through the gas flow portion and cloth 108 is a penetrating portion located within the air bag (claim 1). Regarding claim 2, the penetrating portion 108 divides the gas flow path portion into two flow paths at least.

Regarding claim 7, as functionally recited, penetrating portion 108 reduces an opening area of the gas flow path portion.

Art Unit: 3616

In addition to penetrating portion 108, there is a joint portion or seam at the cloth 108 and edges of openings 106, 107 (column 3, lines 1-4), and cloth 108 and seams combine to reduce an opening area of the gas flow path portion as functionally recited (claims 10-11).

9. Claims 3-5 and 12-15 as best understood are rejected under 35 U.S.C. 102(b) as being anticipated by Maruyama (US Patent 5,593,179).

Maruyama discloses an air bag in a folded state housed in an instrument panel inflated by inflator 16 when the vehicle collides (column 1, lines 15-25), the air bag having an opening portion attached to container 12 receiving gas from inflator 16, a gas flow path portion 22, 24, and an occupant restraint portion at 23. Gas flows from the opening portion to the occupant restraint portion through the gas flow path portion. At least one joint (at stitching 25 in Figure 6; in view of the broad recitation of a "joint portion", the connection 25 meets the claim language, as one dictionary definition of a joint is a point or position at which two or more things are joined) is located within the air bag (inasmuch as applicant's joint portions, which are along an outer periphery of the bag)(claim 3). The joint portion divides the gas flow path portion into two or more [sections?] 22, 24 (claim 4), and the joint portion at 25 sews partially (at least) parts 20a or 20b and 10 of the gas flow path portion together (claim 5).

Maruyama's air bag has a plurality of joint portions (i.e., one on either side of pieces 20a and 20b), the joint portion(s) reduce an area of the gas flow path portion (by holding pieces 20a,

Art Unit: 3616

20b in place), and the joint portions in holding pieces 20a, 20b in place divide the gas flow path portion into multiple flow paths 22, 24 (claims 12-15).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 6 and 8-9 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiota et al.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shiota et al to include a plurality of penetrating portions such as cylindrical cloth 108 in order to reduce volume necessary to fill the air bag (column 4, lines 23-33) using an

Art Unit: 3616

obvious design variant (case law (St. Regis Paper Co. v. Bemis Co., Inc., 193 USPQ 8, 11 (7th Cir. 1977) holds that it is obvious to duplicate parts (i.e. use more than one cylindrical cloth) for multiplied effect (to require even less gas to inflate the bag). The penetrating portions in the obvious design variant would reduce an opening area of the gas flow path portion as functionally recited.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Inoue et al (US Patent 5,857,696) shows joint portions or penetrating portions at 5 in an air bag.

Japanese Patent 4-135940 shows a penetrating portion in a gas flow portion between end parts 2.

Fischer et al (US 2002/0089158 A1) shows a penetrating portion.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric D Culbreth whose telephone number is 703/308-0360. The examiner can normally be reached on Monday-Thursday, 9:30-7:00 alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 703-308-2089. The fax phone numbers for the organization where this application or proceeding is assigned are 703/746-3508 for regular communications and 703/308-2571 for After Final communications.

Application/Control Number: 09/997,334

Art Unit: 3616

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.


Eric D Culbreth
Primary Examiner
Art Unit 3616

1/2/03

ec
January 2, 2003